PART B – SECTOR SPECIFIC INFORMATION

WASTE HEAT RECOVERY BASED POWER PROJECT

1.0 GENERAL

1.1 **Proposed Installed Capacity of** : the Project

1.2 **Proposed location of the Project**

| Village | : | |
|---------------|---|--|
| Taluk | : | |
| District | : | |
| State | : | |
| Telephone/Fax | | |

1.3 Accessibility to Proposed Location of the Project

| Particulars | Name | Distance from Project Site |
|-------------------------|------|----------------------------|
| | | (km) |
| Nearest Tehsil/Block HQ | | |
| Nearest Road Head | | |
| Nearest Railway Station | | |
| Nearest Airport | | |
| Nearest Grid/Substation | | |

1.4 **Special Category if any – Location based**

| | | | Tick as | applicable | | |
|----------|-----------|-------|---------|------------|--------------|----------------|
| NE | Islands & | Hilly | Jammu & | Deserts | Newly formed | Not applicable |
| States & | Estuaries | Area | Kashmir | | states | 11 |
| Sikkim | | | | | | |

1.5 **Details of Proposed Project Land** (Please tick appropriate)

| <u> </u> | <u> </u> | <u></u> | |
|---------------|----------|----------|-----------------------------|
| Particular | Area | Acquired | Whether land is Mortgagable |
| Govt. Land | | | (*) |
| Pvt. Land | | | |
| Forest Land | | | |
| Other Specify | | | |
| Total | | | |

(*In case of Govt. Land is not mortgagable, please enclose letter from the concerned Govt. Authority)

2.0 TECHNICAL

(Enclose Detailed Project Report)

2.1 Details Relating to Resources

2.1.1 Fuel Requirement for the Project

| No | Type of Fuel | Required Quantity (Tons) | |
|----|--------------|--------------------------|-----------|
| | | Per Hour | Per Annum |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |

2.1.2 **Tie-up of fuel for the project**

(in case of Waste Heat Recovery Power Projects)**

| No | Type of Fuel | Arrangements of Supply | Quantity / year | Present Selling Price/ Landed Cost |
|----|-----------------|------------------------|--------------------|--|
| | | | | (Rs.) |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |

(** Please enclose process flow chart with material balance, utilities and process parameters and necessary supporting documents)

2.2 Estimation of Power/ Steam/ By products Generation from the Project

| 2.21 2.22 2.23 | Electrical Power Steam By Products, if any | : : : | Million Kwh/year Million Kcal/year Tons/Year |
|------------------------------|--|-------------|---|
| 2.3 | Project Configuration | | |
| 2.31 2.32 2.33 2.34 | No of Boilers Type & Capacity of Boilers No of TG Sets & Capacity No of Generator Transformers & Capacity | : : : | |
| 2.4 | Procurement Procedure | | |
| 2.41 | Basis of selection of the equipment Details of Procurement Procedure followed : (Please enclose Detailed quotation evaluation report) | : | □Single Quotation / □RFQ Procedure / □Limited Tender / □Published Tender / □Any Other (Please provide details of procedure adopted) |
| 2.42 | Detailed Quotation Evaluation Report | : | \Box Enclosed/ \Box Not Enclosed |

2.5 **Power/ Steam Utilisation Details**

| 2.51 | Name of the Plant | | |
|------|---|--------------|---|
| | 1. | : | Mill Kwh/ K Cal |
| | 2. | : | Mill Kwh/ K Cal |
| | 3. | : | Mill Kwh/ K Cal |
| | 4. Surplus Power available for export to grid, if any | : | Mill Kwh |
| 2.6 | Mode of implementation | | |
| 2.61 | Mode of implementation of the Project | : | Self ESCO (Consultants) |
| | J | | EPC Split Packages |
| | | | (Please tick appropriate) |
| 2.62 | Details of Technical Consultant engaged, if any for DPR preparation & execution of the project | | |
| | Name and address of the consultant who has prepared the DPR Telephone Fax | : | |
| | 4. Contact Person | : | |
| 2.7 | Present Energy Consumption Details | S | |
| 2.71 | Main Plant Capacity | : | |
| 2.72 | Capacity Utilisation Factor (%) Annual Energy Bill i. Power | | D |
| | i. Power ii. Fuel Total | : | Rs Rs Rs |
| 2.73 | Power i. Connected Load [#] ii. Annual Consumption [#] iii. Present Tariff [#] iv. DG Set Capacity v. Generation Cost | :: : : | KVA Million Kwh/year Rs /Kwh KVA Rs / Kwh |
| 2.74 | Fuel Consumption Present Cost (List all the fuels in use) | : | MT/year Rs/MT |

(List all the fuels in use) [#] (Information given is to be supported by necessary documents and essentially required for Captive Power Plant)

3.0 COMMERCIAL

3.1 **Project Cost Estimate (Provide both foreign and local currency Cost)**

| Particulars | Cost | Taxes/Duties, if | Total |
|------------------------------------|----------------|------------------|----------------|
| | (Rs. in lakhs) | any (Rs. in | (Rs. in lakhs) |
| | | lakhs) | |
| Land Cost & Site Development | | | |
| Building and Civil Works | | | |
| Plant & machinery | | | |
| Training and Technical Know-how | | | |
| Fee | | | |
| Miscellaneous Fixed Assets | | | |
| Preliminary Expenses | | | |
| Installation, Engineering, | | | |
| Consultancy Fee | | | |
| Project Management Fee | | | |
| Pre-operative Expenses | | | |
| Contingency (%) | | | |
| Monitoring & Verification | | | |
| Interest During Construction (IDC) | | | |
| Margin Money for Working Capital | | | |
| Others | | | |
| Total Project Cost | | | |

3.2 Proposed Means of Financing

| Particulars | Amount (Rs. in lakhs) | % |
|--|--------------------------|---|
| Promoter's contribution | | |
| Equity Share Capital (please give break-up of sources) | | |
| Internal Accruals (please give break-up of sources) | | |
| Unsecured Loan/ Subordinated Loan (Principal and | | |
| Interest payable after repayment of IREDA's Loan) | | |
| From Promoters, friends, relatives & their associates | | |
| Others, if any - specify | | |

| Term Loan Proposed | |
|--|--|
| From IREDA | |
| From Others (please give details like name of agency/bank, loan amount, interest rate, moratorium, repayment period and current status of sanction) | |
| Subsidy, if any* | |
| Others if any, please specify | |
| Total Project Cost | |

* (Capital subsidy if available will reduce IREDA's loan)

3.3 Purpose of the proposed project

| a) Captive Consumption | | |
|---|--|--|
| b) Selling power to sister concern/subsidiary company | | |
| c) Selling power to autility* | | |
| d) Selling to third party | | |
| | | |
| (* Please enclose copy of Power Purchase Agreement, as applicable. In case of sale to third | | |

(* Please enclose copy of Power Purchase Agreement, as applicable. In case of sale to third party, please enclose copies latest 3 years Annual report of the Company whom you propose to sell power)

:

3.4 Implementation Schedule

Give PERT Chart separately

| Event | Expected date of Completion |
|--------------------------------------|-----------------------------|
| Land Acquisition | |
| Finalisation of Procurement Contract | |
| Completion of Civil Work | |
| Delivery of Equipments | |
| Installation of Equipment | |
| Test Run | |
| Technical Commissioning | |
| Commercial Commissioning | |

3.5 Fund Drawl Schedule

| Amount | Expected date of Drawl | IREDA Loan | Promoters' Contribution |
|--------|---------------------------|---------------|----------------------------|
| | | | |
| | | | |
| | | | |

| | xpected month & year of : ommissioning | | |
|----|--|-------|--------------------------|
| А | ssumptions taken for Performance | e Ind | icator at point No. 3.7: |
| a |) Rate of Interest, repayment period (incl. Moratorium) for proposed loan from IREDA | : | |
| b |) Rate of Interest, repayment period (incl. Moratorium) for the loan from others, if any | : | |
| c |) Plant Load Factor for the Plant | : | |
| d |) Auxiliary Power Consumption | : | |
| e |) Net Power available for sale/consumption in Million Units | : | |
| f) | Tariff Rate escalation per annum | : | |
| g |) Fuel cost escalation per annum | : | |
| h |) Annual O & M Charges | : | |
| i) | Annual escalation of O & M Charges | : | |
| j) | Wheeling Charges, if applicable | | |
| k |) Depreciation Buildings | : | |
| 1) | Depreciation Plant and Machinery | : | |
| n | n) Corporate Tax | | |
| n |) Minimum alternate tax | | |
| 0 |) Any other (Please Specify) | | |
| Р | erformance Indicators | : | |
| |) IRR) DSCR (Average)) Pay Back Period | : | |

(Please enclose detailed cash flow statements if the same are not annexed with the DPR)

4.0 ENVIRONMENTAL BENEFITS

| 4.1 | Major environmental issues (e.g, forest, land, water, pollution) | |
|-----|--|--|
| 4.2 | Area of forest/ agricultural/ tribal land, if any required for the project | |
| 4.3 | Is there any village irrigation scheme in the canal/ river/ or any other source from which water is proposed to be drawn | |
| 4.4 | Details on afforestation/ deforestation by the project implementation | |
| 4.5 | Area/ methodology for fly ash/ effluent any other waste material disposal | |

5.0 SOCIAL BENEFITS

| | Particulars | During Construction | After Implementation |
|-----|--|----------------------------|----------------------|
| 5.1 | Total Direct Employment | | |
| 5.2 | Total Indirect Employment | | |
| 5.3 | Average Monthly Income Person (Rs.) | | |
| 5.4 | Details of any families, affected/displaced by the project | | |
| 5.5 | Details of social benefits envisaged through the proposed project | | |

6.0 SECTOR SPECIFIC APPROVALS /DOCUMENTS

| Documents/Papers | Obtained/ Enclosed | To be Applied |
|--|---------------------------|---------------|
| Approval of SEB/State Govt, if any for the proposed project | | |
| Water Allocation for the project | | |
| Pollution & Environment clearance | | |
| Clearance for chimney height | | |
| PERT Chart and Organisation Chart | | |
| Schematic diagram of the process/system | | |
| EIA Report, if applicable | | |
| Power Purchase Agreement, if sale of power is involved | | |
| Fuel Supply Agreement | | |
| MOU/Agreement with third party etc | | |
| Copy of Order/Agreement already entered into for installation | | |
| Customer reference list of the proposed supplier of major equipment | | |
| Performance Guarantee from Equipment manufacturer | | |
| Copy of Tender floated/Enquiries made regarding plant and machinery | | |
| Summary of the budgetary offiers for main plant & machinery | | |
| Note outlining reasons for selection of any particular machine supplier or technology supplier | | |
| Copy of Agreement for Sale/Lease of Land | | |
| Other State/Central Govt, approvals, if any | | |
| Other Clearances (Please Specify) | | |

| Place : | Signature : |
|---------|----------------------|
| | Name & Designation : |
| Date : | Rubber Stamp : |
| | |